

PATENTS: TAPPING THE POTENTIAL OF INNOVATIVE NEW PRODUCTS

"Just as energy is the basis of life itself, and ideas the source of innovation, so is innovation the vital spark of all man-made change, improvement and progress."

Theodore Levitt,
editor of *The Harvard Business Review*.

The pace of innovation and progress has accelerated to the point that we find ourselves surrounded by new products and services and we can no longer keep up with all the developments and innovations in our marketplace. However, generating innovations is one thing, preventing others from free riding on the fruits of one's innovative output is an entirely different matter. No one will spend time, money and effort on innovating if someone else can immediately copy his invention. That is why a report entitled *The Role of Intellectual Property in Innovation* by the Prime Minister's Science and Engineering Council in Australia stated the following:

"The protection afforded by intellectual property laws is very important to those businesses investing in R&D in order to bring new products into the marketplace. Without this barrier, innovation is like a crop in an unfenced field, free to be grazed by competitors who have made no contribution to its cultivation."

The rewards of successfully commercializing an innovation can be enormous, provided that the new or original knowledge embodied in a product is not freely copied by unscrupulous competitors. The patent system plays a key role in achieving this objective. It lays down the rules of the game and

helps reduce uncertainty in a marketplace that would otherwise be fatal to investment decisions and competitiveness.

Patent owners can stop others from using their ideas, or permit such use on payment of a one-time fee or a recurring royalty. Thus patents, for a limited time, give the right to prevent imitators, who have taken none of the risks and made little investment, from copying the research and development results of innovators.

Patent Protection

Simply put, the patent system imparts certain characteristics of tangible property to an invention, thereby enabling it, or new products made by using it, to be controlled, exploited, or sold in the marketplace. It creates quasi-property or a "commodity" out of new and useful knowledge, and thereby facilitates market transactions of various kinds involving a new product embodying it, the invention itself or the entity owning the patent. A patent prevents others from making, using, selling or exporting an invention, and from using a patented process, generally for up to 20 years. In exchange for that period of exclusivity, the owner of the patent has to disclose the invention fully in his patent application.

Patent Information

The vast majority of patents are legally expired, are past their period of protection, yet contain very useful and valuable information. Patents are classified in distinct categories, making it relatively easy to retrieve relevant information from the collection of some 40 million patent documents granted or registered worldwide. Therefore efforts and limited resources need



not be wasted on "reinventing". Timely and thorough searches should be made of patent literature at every key decision stage when taking a new idea to the market. Unknowingly infringing someone else's patent can be a very costly mistake that could ruin an otherwise sound and well managed business.


Patent information searches were originally confined to defining "prior art," as a patent is granted for an invention that provides a novel and non-obvious solution to

a technical problem. A search of patents still in force may reveal whether someone else has already claimed the supposedly new idea, or parts of it. The novelty of a patent is determined on a worldwide basis, and requires the examining patent office to search all relevant scientific and technical literature, including relevant patent literature.

Businesses worldwide also refer to the information contained in patent documents when deciding whether to file a patent application; they will also use it as a tool of competitive intelligence, for mapping technology trends, for steering their invention work around patents held by others, for avoiding infringement of patents owned by others, for finding new sources of technology and new business partners, especially in export markets, for pooling patents, for cross-licensing patents, for making strategic alliances and above all **for accessing the incredible amount of very useful technical information that is in the public domain without anyone's prior permission and without having to pay any fee or royalty.**

Disclosure

A tricky question that will repeatedly need an answer is whether to keep the invention secret for as long as may be useful or to seek a patent. In many cases, an invention has to be kept secret, in other words undisclosed, until a provi-



Courtesy of Novartis A.G.

"Patents are equally vital for SMEs. It is one of their only possibilities to secure a market for their innovations. Thus, very successful mid-sized companies like Amgen and Genentec started life as very small companies with a promising project, and patent protection therefor. Without the patent protection they would not have been able to establish their product on the market and, equally important, nor would they have been able to find licensees to market it around the world."

Brian Yorke, Head,
Corporate Intellectual Property, Novartis International AG

sional or regular patent application has been duly filed. Some forms of communication that may not be considered disclosure are:

- ⇒ speaking on site with colleagues/employees of the same organization as the inventor;
- ⇒ meeting with others under circumstances of acknowledged confidentiality (preferably in writing);
- ⇒ theses held under moratorium;
- ⇒ papers submitted for publication and grant applications provided that the recipients and reviewers are under the obligation to observe confidentiality.

In most countries the patent is granted to the first applicant who files the patent application, with the notable exception of the United States of America, which grants a patent to the one who is the first to invent. It is not always easy, therefore, to determine the best time to file a patent application. This decision gets further complicated if a business has a direct or indirect interest in markets abroad. Although most patent offices do allow the inventor to file a patent application, most applications are drafted and filed by a patent agent or attorney, who has the requisite technical background in addition to the legal knowledge of patent law

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and the practical experience and skill in drafting patent claims. A patent attorney can guide a business through the process, especially the most critical part of a patent application which defines the scope of the invention – called the claims – so that it can be assured of the broadest possible ownership of all parts of the idea.

Using Patents

Licensing of non-core patents can be big business in itself. IBM reaped more than US\$1 billion in licensing fees last year from 1,600 companies. Small businesses use their patents not only to hold off competitors, but also to attract investors. A strong patent position can be the most valuable asset of a small, technology-based company. Patents in such businesses are not only a source of underlying strength, but also a useful instrument for marketing new products and the new enterprise itself as a good candidate for acquisition by a larger company.

For more information on various practical aspects of the IP system of interest to business and industry, please visit the website of the SMEs Division at www.wipo.int/sme.

The next article in IP and Business will be on "Patents and Development of New Products".

IP MANAGEMENT AND COMMERCIALIZATION

Monterrey, Mexico – recently recognized by Fortune Magazine as the "best city to do business in Latin America" – hosted a WIPO international workshop on the management and commercialization of inventions and technology from April 17 to 19. The workshop aimed to provide the private sector, academics and research institutions with information on the main tools and strategies for effective management of intellectual property rights and commercialization of technology.

The *Tec de Monterrey*, at the heart of Mexico's university system which comprises 29 campuses in 26 cities, hosted the workshop, which was attended by over 350 participants from 14 different Latin American countries. The university, which is a leader in distance learning, used satellite transmission to broadcast the event to other locations in Mexico and to universities in Latin America. This allowed approximately 800 additional participants to attend and follow the workshop. The distance learning program of *Tec de Monterrey* has 1,280 locations in Mexico and 159 in eleven other countries in Latin America.

The workshop, organized jointly with the Mexican Institute of Industrial Property (IMPI) and the *Tec de Monterrey*, focused particularly on how to lend assistance to researchers, inventors and local industry. For that purpose speakers and experts



were invited from Brazil, Germany, Mexico, Uruguay and the United States of America to share experiences with the participants.

Further discussion on strategies centered on intellectual property policies needed in universities and research and development organizations to support the diligent use and management of intellectual property rights and the commercialization of research results and technology. Discussions followed on the assessment and valuation of inventions, licensing agreements for technology created through university research programs, intellectual property information services and the role of the Patent Cooperation Treaty (PCT) in supporting these strategies.